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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,782	02/25/2002	James Lam	O2 Micro 02.03	2081

41066 7590 01/28/2005

WAGNER, MURABITO & HAO, LLP
TWO NORTH MARKET STREET, THIRD FLOOR
SAN JOSE, CA 95113

EXAMINER

PERVEEN, REHANA

ART UNIT	PAPER NUMBER
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2116

DATE MAILED: 01/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/082,782	Applicant(s) LAM, JAMES	
	Examiner Rehana Perveen	Art Unit 2116	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 19-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 and 34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/11/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

- I. Claims 1-18 and 34, drawn to power conservation by outputting stored data from a buffer during a sleep mode, classified in class 713, subclass 320.
- II. Claims 19-23, drawn to access limiting via programmable registers to limit access to the system memory, classified in class 710, subclass 36.
- III. Claims 24-33, drawn to computer power control by supplying individual clocks to a plurality of devices which enable the devices to enter one of a plurality of sleep states, classified in class 713, subclass 322.

The inventions are distinct, each from the other because of the following reasons:

Inventions I, II, and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions have different functions.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Mr. James Hao on 24 January 2005 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-18 and 34. Applicant in replying to this Office action must make affirmation of this election. Claims 19-33 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-18 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admission of Prior Art (AAPA), in view of Rawlings et al, Patent No. 4,156,907.

As to claims 1, 6, and 34, AAPA teaches a processing circuit configured to operate in a first power state, a second power state, and a third power state, the processing circuit consuming less power in the second power state than in the first

power state, the processing circuit consuming less power in the third power state than in the second power state, and a real time subsystem coupled to the processing circuit (applicant's disclosure, pages 1-3).

However, AAPA does not expressly teach the real time subsystem comprising a buffer, the buffer configured to store data and output said data to an output device thereby enabling the processing circuit to enter the third power state while the buffer is outputting the data.

Rawlings et al teach a real time subsystem comprising a buffer (col. 56 lines 16-25), the buffer configured to store data and output said data to an output device thereby enabling a processing circuit to enter a third power state while the buffer is outputting the data (col. 59 lines 5-35 and col. 60 lines 8-23).

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of AAPA and Rawlings et al because Rawlings et al's outputting stored data while the processing circuit is at the third power state would have enabled improved power consumption of the prior existing computer systems capable of playing real time applications.

As to claims 2 and 3, AAPA teaches the computer having different power states. However AAPA does not specify the computer having a full power state (C0), a first light

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sleep state (C1), a second light sleep state (C2), and a deep sleep state (C3). The examiner takes Official Notice that it is quite well known in the prior art computer to successively enter states of progressively lower power consumption such as a full power state (C0), a first light sleep state (C1), a second light sleep state (C2), and a deep sleep state (C3). Accordingly, it would have been obvious to one of ordinary skill in the art at the time of the invention to use these specific power states in the computer disclosed by AAPA.

As to claims 4 and 7, AAPA teaches the real time application subsystem is a video subsystem or an audio subsystem (applicant's disclosure, page 1).

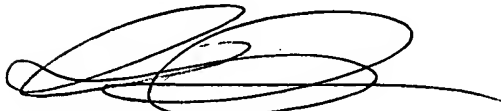
As to claim 5, Rawlings et al teach the buffer is a FIFO buffer (col. 44, Table VIII, item 38).

Claims 8-18 are directed to the method of system claims 1-7 and 34. Klein and Rawlings et al, in combination, teach the system as set forth in claims 1-7 and 34. Therefore, Klein and Rawlings et al, in combination, also teach the method as set forth in claims 8-18.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rehana Perveen whose telephone number is 571-272-3676. The examiner can normally be reached on 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne H Browne can be reached on 571-272-3670. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, consisting of several loops and a long horizontal stroke extending to the right.

Rehana Perveen
Primary Patent Examiner
Technology Center 2100